

What is claimed is:

1. A downward illumination assembly for directing light downward from the ceiling area of a room, the assembly comprising:

a lamp housing having a closed upper end, an open lower end disposed axially opposite the closed upper end, and a housing wall extending from around a periphery of the upper end to and defining the open lower end, the lower end configured to be positioned adjacent an opening in a ceiling panel;

a ceiling mount carried by the housing wall and configured to provide an engagement surface for mounting the lamp over an opening in a ceiling panel;

a lamp supported in a lamp socket within the lamp housing in a position to radiate light through the lower end of the housing and through the opening in the ceiling panel; and

a module removably supported on the housing and carrying the lamp socket, the lamp socket being removable from the lamp housing with the module to allow the lamp socket and/or associated wiring to be serviced or replaced without removing the lamp housing from the ceiling panel or disconnecting and lowering the ceiling panel from its support structure.

2. A downward illumination assembly as defined in claim 1 in which:

the lamp includes a fluorescent tube; and

the module carries a ballast configured to regulate current flow to the fluorescent lamp, the ballast being removable with the module from the housing.

3. A downward illumination assembly as defined in claim 1 in which the module includes an opening aligned with an opening in the housing and extending radially outward from the lamp housing canister wall.

4. A downward illumination assembly as defined in claim 1 in which the assembly includes a current path that passes through the module to the lamp socket.

5. A downward illumination assembly as defined in claim 1 in which the assembly includes a pair of fluorescent lamp tubes and a pair of sockets configured to removably receive the tubes.

6. A downward illumination assembly as defined in claim 1 in which the housing wall defines a tubular canister and the ceiling mount includes at least two tabs carried at diametrically opposite positions on the canister and extending radially outward from an outer surface of the housing wall, the ceiling mount tabs being configured to provide an engagement surface for fasteners to mount the lamp housing on an upper surface of a ceiling panel surrounding an opening in such a panel.

7. A downward illumination assembly for directing light downward from the ceiling area of a room, the assembly comprising:

a lamp housing having a closed upper end, an open lower end disposed axially opposite the closed upper end, and a housing wall extending from around a periphery of the upper end to and defining the open lower end, the lower end configured to be positioned adjacent an opening in a ceiling panel;

a ceiling mount carried by the housing wall and configured to provide an engagement surface for mounting the lamp in an opening in a ceiling panel;

a lamp supported in a lamp socket within the lamp housing in a position to radiate light through the lower end of the housing and through the opening in the ceiling panel;

a ballast electrically coupled to the socket and carried by the module and configured to regulate current flow to the fluorescent lamp through the socket; and

a module removably supported on the housing and carrying the ballast, the ballast being removable with the module from the housing to allow the ballast and/or associated wiring to be serviced or replaced without removing the lamp housing from the ceiling panel or disconnecting and lowering the ceiling panel from its support structure.

8. A downward illumination assembly as defined in claim 7 in which the module carries the lamp socket, the lamp socket being removable from the lamp housing with the module.

9. A downward illumination assembly as defined in claim 7 in which the ceiling mount includes at least two ceiling mount tabs extending radially outward from an outer surface of the housing wall, the ceiling mount tabs being configured to provide an engagement surface for fasteners to mount the lamp housing on an upper surface of a ceiling panel surrounding the opening in such a panel.

10. A downward illumination assembly for directing light downward from the ceiling area of a room, the assembly comprising:

a lamp housing having a closed upper end, an open lower end disposed axially opposite the closed upper end, and a housing wall extending from around a periphery of the upper end to and defining the open lower end, the lower end configured to be positioned adjacent an opening in a ceiling panel;

a ceiling mount carried by the housing wall and configured to provide an engagement surface for mounting the lamp in an opening in a ceiling panel;

a lamp supported in a lamp socket within the lamp housing in a position to radiate light through the lower end of the housing and through the opening in the ceiling panel; and

a trim bezel having an upper portion and a flange extending laterally outward from around a lower periphery of the upper portion, the trim bezel upper portion being supportable by friction fit in any position within a range of axial positions within the lamp housing and configured to pass through a hole in a ceiling panel that the housing is mounted to and to be positioned within the lamp housing such that the flange is supported adjacent the lower surface of such ceiling panel.

11. A downward illumination assembly as defined in claim 10 in which a module is removably supported on the housing and carrying the lamp socket, the lamp socket being removable from the lamp housing with the module to allow the lamp socket and/or associated wiring to be serviced or replaced without removing the lamp housing from the ceiling panel or disconnecting and lowering the ceiling panel from its support structure.

12. A downward illumination assembly as defined in claim 10 in which a module is removably supported on the housing and carrying the ballast, the ballast being removable with the module from the housing to allow the ballast and/or associated wiring to be serviced or replaced without removing the lamp housing from the ceiling panel or disconnecting and lowering the ceiling panel from its support structure.

13. A downward illumination assembly as defined in claim 10 in which the ceiling mount includes at least two ceiling mount tabs extending radially outward from an outer surface of the housing wall, the ceiling mount tabs being configured to provide an engagement surface for fasteners to mount the lamp housing on an upper surface of a ceiling panel surrounding the opening in such a panel.

14. A downward illumination assembly as defined in claim 10 in which the assembly includes spring clips supported at spaced locations on an outer surface of the upper reflector portion of the trim bezel, the trim bezel upper reflector portion being axially retainable within the range of axial positions within the housing by engagement with the spring clips.

15. A downward illumination assembly as defined in claim 10 in which the trim bezel upper portion has a tapered tubular shape and is configured to be received within the tubular canister-shaped housing wall, the flange being annular in shape and extending radially outward from around the lower periphery of the upper portion.

16. A downward illumination assembly as defined in claim 14 in which the spring clips are directed downwardly such that a sharp distal edge of each clip serves to engage the inner surface of the housing wall.

17. A method for servicing components of a downward illumination assembly when the assembly is carried by and opens through an opening in a ceiling panel, the method comprising the steps of:

providing a downward illumination assembly carried by a ceiling panel, the assembly including a downwardly-opening lamp housing, a ceiling mount carried by the lamp housing and configured to support the assembly on the ceiling panel, a lamp supported in a lamp socket within the lamp housing, and a module removably supported on the housing and carrying components of the assembly;

gaining access to the area above the ceiling panel;  
removing a module from the lamp housing;  
servicing a component carried by the module; and  
re-installing the module on the lamp housing.

18. The method of claim 17 including, where the ceiling panel is supported in a passenger elevator, the step of gaining access to the area above the ceiling panel includes opening an access door in a top panel of such elevator.

19. The method of claim 17 in which the step of providing a downward illumination assembly includes connecting the housing to a top surface of the ceiling panel with the housing opening aligned with a hole formed through the ceiling panel and inserting the

upper portion of a trim bezel into the housing until a flange of the trim bezel contacts the lower surface of the ceiling panel.

20. The method of claim 19 in which the step of inserting the upper portion of the trim bezel into the housing includes causing spring clips supported on the trim bezel to engage an inner surface of the housing wall.